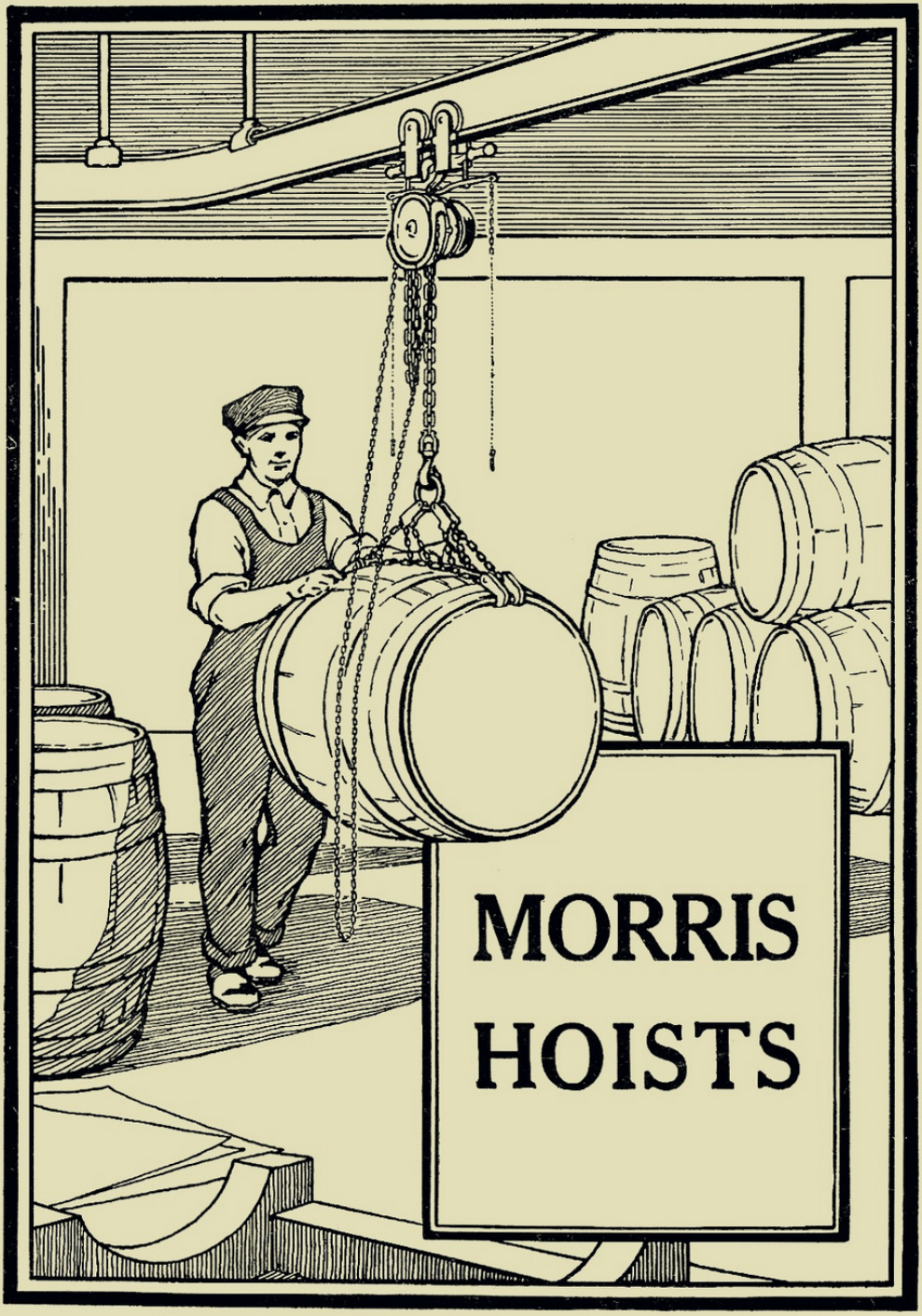
MORRIS
HOISTS

CONTENTS

Other books in the same series deal comprehensively with a variety of Morris products: those who require facts and figures cannot do better than ask for a copy of whichever of the following books best responds to their need.

Book 5040 Morris tracks

Book 5051 Morris trucks

Book 5055 Morris jib-cranes

Book 5060 Morris overhead cranes

Book 5066 Morris traveling jib-cranes

Book 5070 Morris chain-slings and grabs

Book 5073 Morris ash-handling equipment

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

Morris lifting machinery has spread its fame during the last four decades to every corner of the world. Morris hoists have voyaged in the sturdy oaken hulls of the arctic explorer, they have followed the toilsome trail over the Andes by pack-mule, and into mysterious Thibet they have also found their way. In civilized countries as well as in remote places, wherever the operation of trade and industry involves the raising or moving of large or small loads the name Morris stands **first** for Service, Safety, Economy, Durability, Efficiency and Character.

This corporation is an organization, one of a group of associated companies, created for the purpose of giving to our friends in the form of hoists, trolleys and cranes the essence of these forty years of experience, research and big-scale production.

Another function of the organization, a function which differentiates it very completely from many others, is to furnish free, friendly advice on the most effective application and use of the many Morris standard handling devices.

Every Morris sales-engineer has the cheerful assurance that he is not only authorized but instructed to give his sincere, honest advice to prospective purchasers, acting as a consulting engineer, rather than a salesman. There is nothing altruistic about this attitude; it is quite obvious that the permanent satisfaction of our customers is essential to our own continued welfare, that we can only make friends by being a real friend. The continued growth in the volume of our output and the number of our customers is sufficient proof of the soundness of this policy.

To users of Morris lifting devices the foregoing remarks will be quite unnecessary, though we know they will regard them with the indulgent eye of an old friend. Only to those who have not yet standardized on Morris lifting and shifting machinery is it necessary to add this much more. We ask no one to judge our products by what we say about them. We are always ready to send out standard articles, to any responsible firm, on terms of unconditional approval. They make good on their merits or they are shipped back home at our expense.

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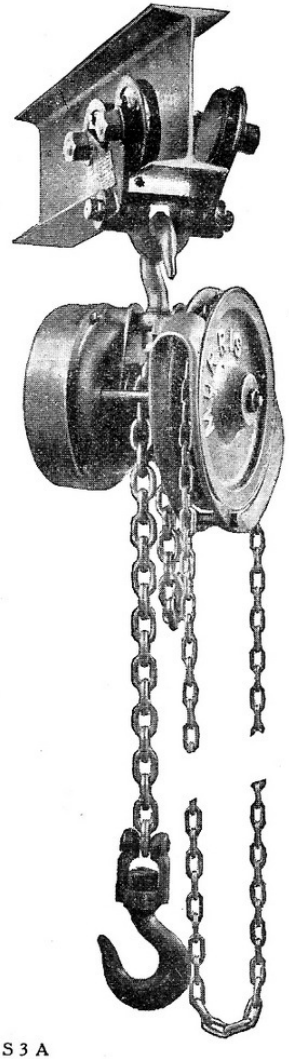

S 3 A

A MORRIS TRIPLE-GEAR BLOCK is particularly useful in locations which are exposed to dust, moisture, steam or chemical fumes, the gears being entirely enclosed. For hard, continuous work its high mechanical efficiency makes it an ideal hoist and a good investment.

The frame is formed integrally with the load-wheel bearings, insuring perfect alignment. It is reinforced by mild steel plates, so that no castings are subjected to tensile stresses.

The gearing is an epicyclic train having machine-cut spur pinions, giving a perfectly smooth lifting motion.

The disposition of the gearing is such that the tooth-thrusts balance the bearing pressures, reducing friction losses to a minimum. This arrangement, coupled with accurate workmanship, provides a highly efficient lifting mechanism. On the one-ton hoist a pull of about 80-pounds on the hand-chain is sufficient to raise the load. Continuous work only serves to bed in the gears and bearings, maintaining the friction loss at a nominal amount. The sustaining of the load is accomplished by means of an automatic brake, which offers no resistance to lifting.

The braking action is proportional to the load suspended from the hook at any given time so that the effort required for lowering is reduced to a minimum.

The capacity of these Morris blocks is measured in long tons of 2240 pounds to the ton. They are tested before shipment with a load 50% greater than the working capacity with which they are marked. This overload test is the best guarantee of safety to the user, who should discourage the unwise practice of regularly overloading Morris blocks.

Morris Triple-gear blocks for highest efficiency

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

The load-hook furnishes a typical example of the quality of the material used in the construction of Morris chain-blocks.

The illustrations on this page show the progressive stages of a batch "test to destruction." Notice that the hook carried seven times the working load before it opened out sufficiently for the weight to slip off. There was no sudden, unannounced failure, but a gradual easing down under a heavy overload.

Lifting chain, as used in Morris chain-blocks, is made of the best material available. The links are carefully formed to fit the pockets of the load-wheel accurately and uniformly. The welds are given such special attention that they are always stronger than the rest of the link. The completed chain must support double the working load without deformation. The final test for accuracy is in a formed mould.

The load-chain sheave is formed with great accuracy by a special process to ensure proper support for every link as it passes through the pockets. Correct form gives high efficiency and promotes durability.

The load-hook shackle is a one-piece forging with an oval pin which avoids the use of a specially welded link to connect the hook to the chain.

B 306

As a final test the hook has been hammered out straight without being previously heated. Even under this drastic treatment no sign of fracture can be distinguished.

B 310

A regular 1-ton load-hook after lifting a test load of 1½ tons. There is no sign of deformation.

B 308

The same hook tested with 6 tons shows only a slight opening out.

B 307

Even 7 tons fails to cause so much as a hair-crack in the homogeneous metal of this 1-ton hook.

Every block tested with a 50 per cent. overload

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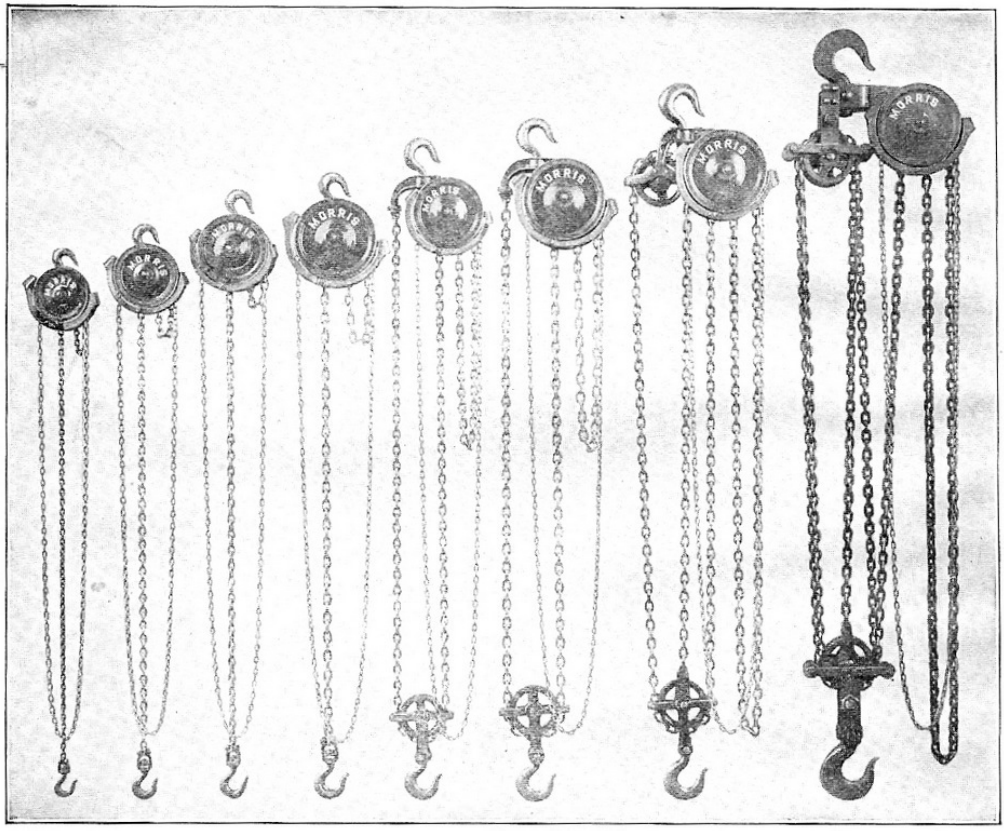

S. 18 A. Some useful sizes of Triple-gear blocks.

Morris Triple-gear chain blocks are made in sizes from 1/4-ton to 20-tons, but for all loads above 5-tons the Worm-gear chain-block should be selected for its greater simplicity.

A ball-swivel hook is a good investment. Any job involving much twisting of the load—as in assembling an engine—can be done quicker and more safely with an easy turning hook.

Capacity in tons	1/4	1/2	1	1 1/2	2	3	4	5	6	8	10
Price, standard lift	$70.	$70.	$90.	$120.	$140.	$180.	$220.	$280.	$330.	$400.	$480.
Extra lift, per foot	$1.80	$1.80	$1.90	$2.00	$2.10	$3.00	$3.20	$4.30	$4.30	$5.40	$6.50
Ball-swivel hook	$8.	$10.	$12.	$16.	$18.	$22.	$26.	$30.	$32.	$34.	$38.
Standard lift, feet	8	8	8	8	9	10	10	12	12	12	12

All Morris blocks are rated in tons of 2240 pounds

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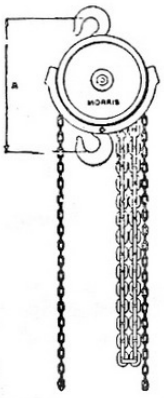
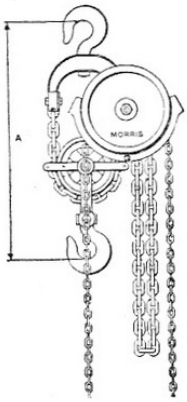
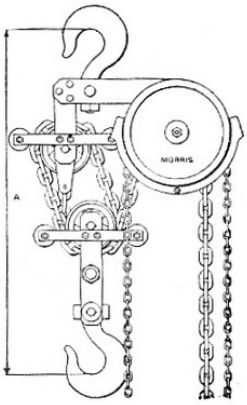


S. 23 A. Type 16.



Type 17.



Type 19.

The following figures on Triple-gear hoists are offered to assist in selecting correct equipment: individual hoists may give slightly different results from these average values, depending on conditions.

Chain-pull is figured for tons of 2000 pounds: speed of lift is based on a hand-chain speed of 150 feet per minute: this is normal for short lifts and for men regularly using hand-hoists. For light loads these speeds can be considerably increased.

The "reach" of a chain-block is ascertained by adding the clear-lift to the minimum length, or drawn up dimension "A."

Working load, tons	¼	½	1	1½	2	3	4	5	6	8	10
Stand'd type no.	16	16	16	16	16	17	17	18	18	19	19
Min. length "A"	1′1″	1′ 2″	1′ 5″	1′ 7″	1′ 11″	2′ 6″	2′ 10″	3′ 4″	3′ 9″	4′ 2″	4′ 8″
Overhaul, ft. lift	8ft.	21	31	35	42	70	84	126	126	168	210
Chain-pull, full ld.	76	61	82	109	118	115	124	110	132	140	145
No. men, full load	1	1	1	1	2	2	2	2	2	2	2
Speed lift, pr. min.	18ft.	8	5	4½	3½	2½	1½	1¼	1	¾	½
Net weight in lbs.	54	55	82	127	190	200	285	375	385	450	560
Shipping wt., lbs.	75	75	100	150	220	230	320	430	440	500	620
Packing case, ins.	14x 12 x 11	14x 12 x 11	16x 12 x 11	18x 14 x 13	24x 20 x 17	24x 20 x 18	30x 26 x 18	30x 26 x 20	34x 26 x 20	36x 26 x 20	40x 26 x 20
Tel. code word	Tylet	Tylar	Tylys	Tyliv	Tylow	Tylux	Tylpe	Tylgo	Tymal	Tymbo	Tymeg

For every hoisting job there is a standard Morris hoist

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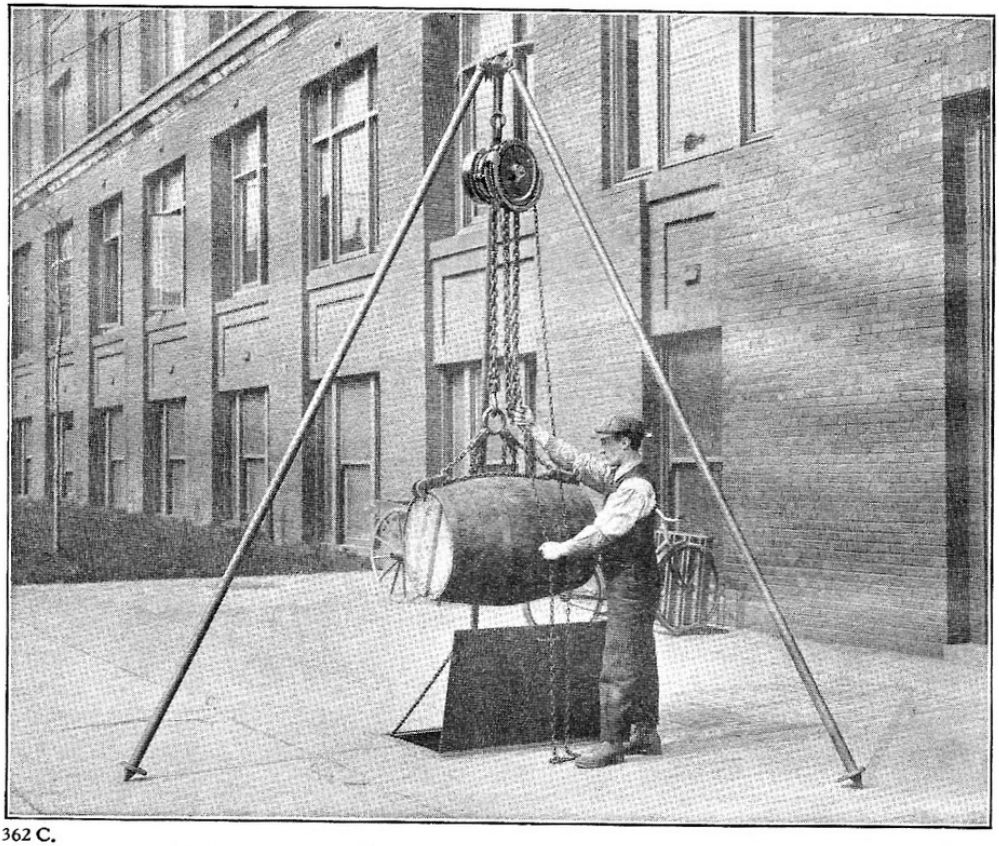
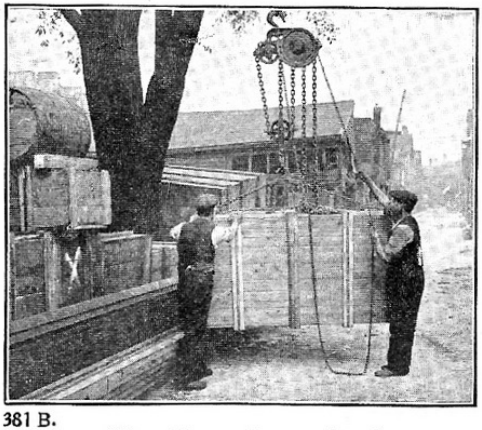


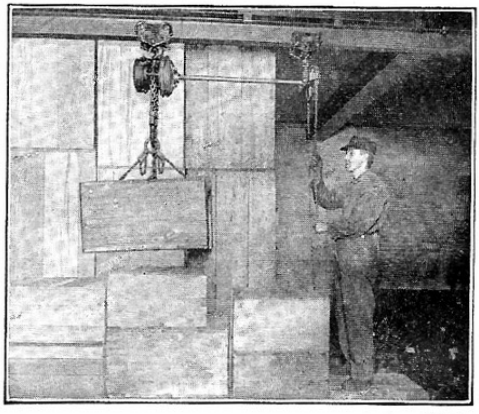
362 C.

A Morris triple-gear chain-block, a Morris tubular steel tripod, a Morris adjustable barrel sling, combined make an excellent sidewalk elevator.



381 B.

Handling a heavy load



449 A.

Stacking cased goods

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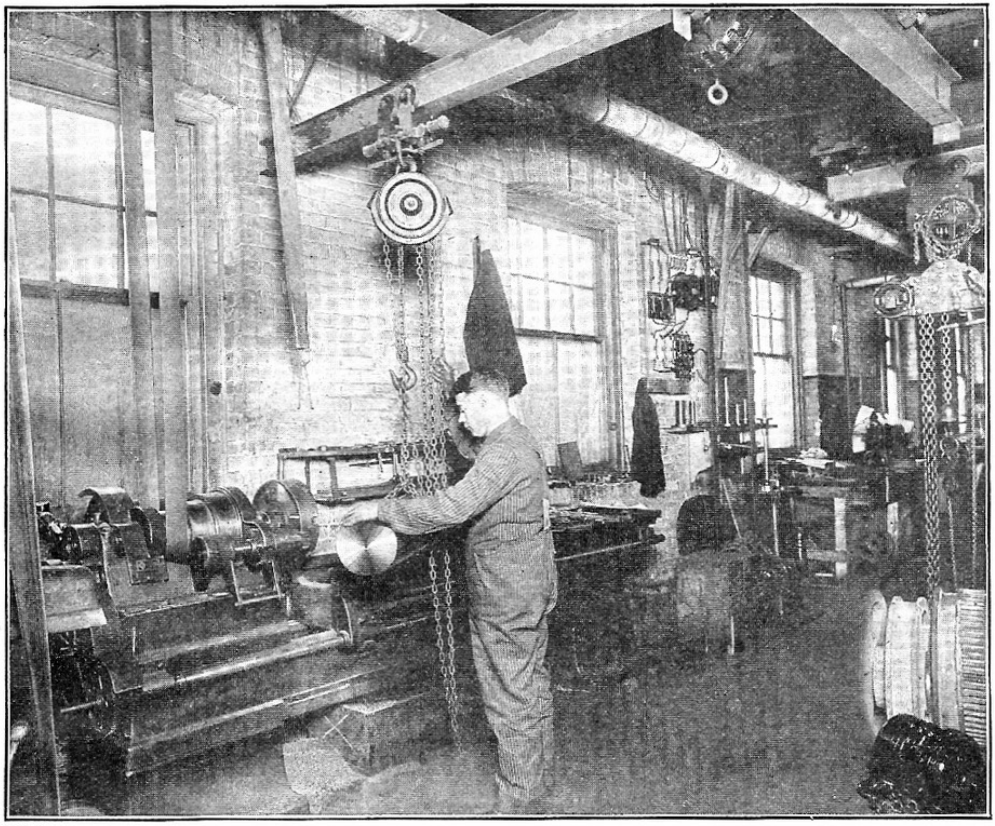
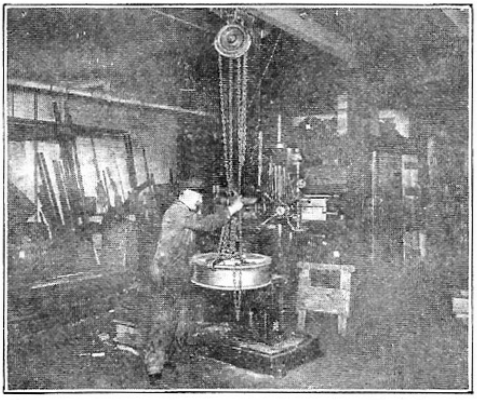


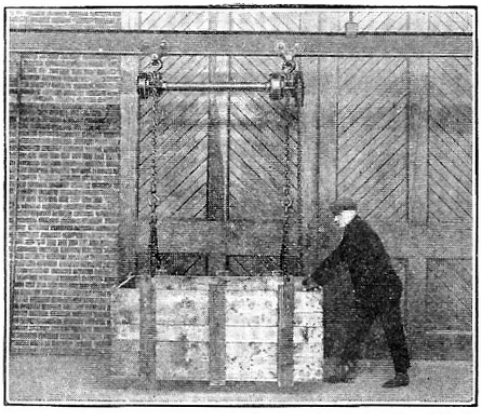
370 B.

The saving of manpower is being accomplished in almost every trade by means of Morris hoists; they are powerful, efficient and durable.



368 A.

A useful aid at the "radial"



666 A.

The twin-lift hoist at work

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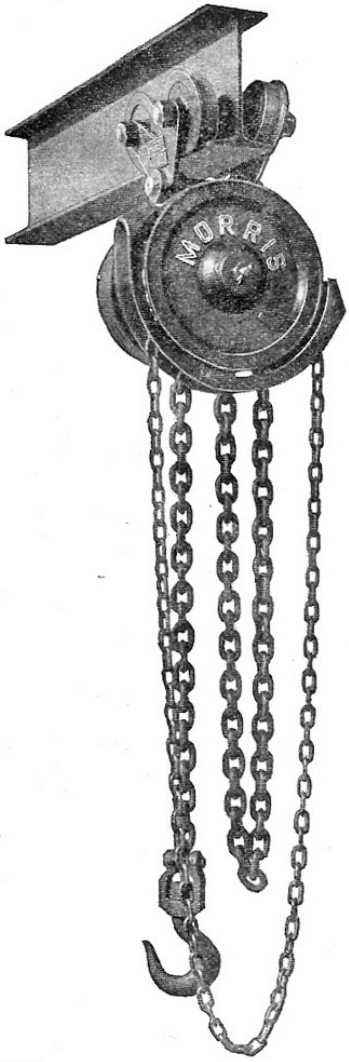

634 A.

A MORRIS TRAVELING TRIPLE-GEAR BLOCK provides at low cost a compact lifting unit which is useful in many cases of limited head-room.

This trolley-hoist is obtained by building a standard Triple-gear hoist into a standard trolley: all parts of the lifting mechanism are interchangeable with those of any Morris Triple-gear chain-block of the same capacity.

The traveling portion is readily adjustable, so that the owner can transfer the traveling hoist from one beam to another of different size without the need for rebuilding.

Working load, tons	1/4	1/2	1	1 1/2	2
Standard type no.	31	31	31	31	31
Beam to hook, min	13 1/2″	13 1/2″	16 1/2″	18 1/2″	22″
Range of beams	4–12	4–12	5–15	7–20	7–20
Min. track radius	22″	22″	24″	33″	39″
Net weight, pounds	65	66	108	155	205
Shipping weight, lbs	85	90	130	200	270
Price, 10 ft. to beam	$102	$105	$132	$176	$204
Extra lift, per foot	$1.80	$1.80	$1.90	$2.00	$2.10
Ball-swivel hook	$8	$10	$12	$16	$18
Teleg. code word	Zytor	Zytpe	Zytro	Zytus	Zytyt

For cramped quarters in paper-mills, on board ship, in basements or elsewhere, the Morris traveling triple-gear chain-block provides a happy exit from the difficulty of lifting a high load in a limited height.

Specify the height from the ground to the beam when ordering, and thus get the chains the right length for the job.

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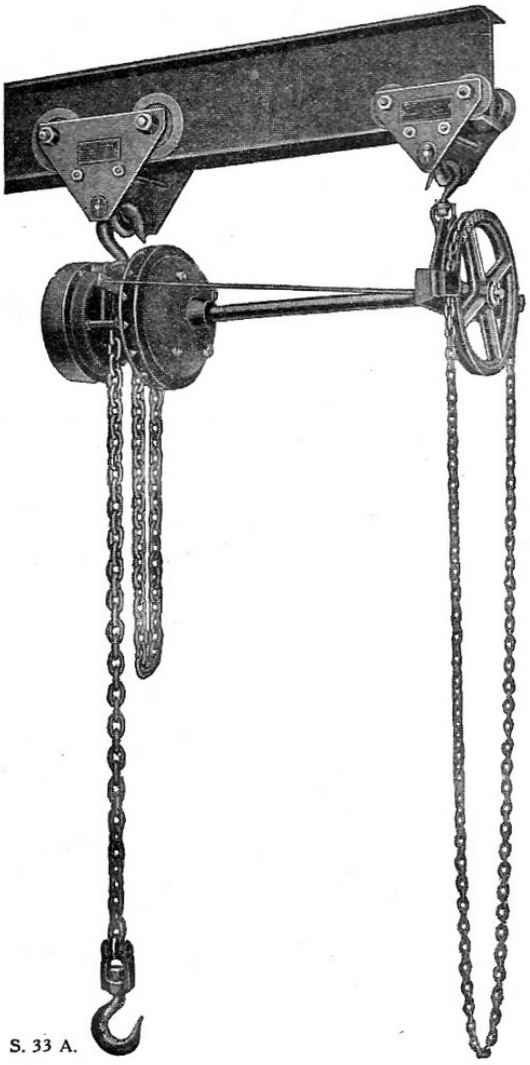

S. 33 A.

EXTENSION OF THE HAND-WHEEL of a Morris Triple-gear chain-block is a very useful addition in all cases where the load is bulky, or where for some other reason the operator cannot stand close to job.

The hand-chain hangs freely where the workman can put all his weight into the pull, and where it is not likely to damage the goods he is moving or piling. A steel chain dipping into a dye-vat or into a ladle of molten metal might easily cause disaster. The Morris hand-wheel extension block is avoiding just such trouble in many factories, large and small.

The prices given in the table below do not include the trolleys shown in the illustration, they allow for a standard extension of two feet. Trolley particulars will be found on another page.

Gear-ratios, weights, dimensions, hand-pulls and other statistics are enumerated under the head of Triple-gear chain-blocks.

The extension is measured from the center of the load-chain to the center of the hand-chain.

Working capacity	¼ ton	½ ton	1 ton	1½ ton	2 ton
Price for standard lift.....	$96.	$100.	$120.	$150.	$170.
Add per extra ft. extension.	$0.90	$0.90	$1.10	$1.20	$1.30
Add per extra foot, lift.....	$1.80	$1.80	$1.90	$2.00	$2.10
Add for ball-swivel hook...	$8.00	$10.00	$12.00	$16.00	$18.00
Standard lift, feet.....	8	8	8	8	9
Telegraphic code word.....	Zyzas	Zyzet	Zyziv	Zyzsa	Zyzte

Make sure you have the right hoist for the job

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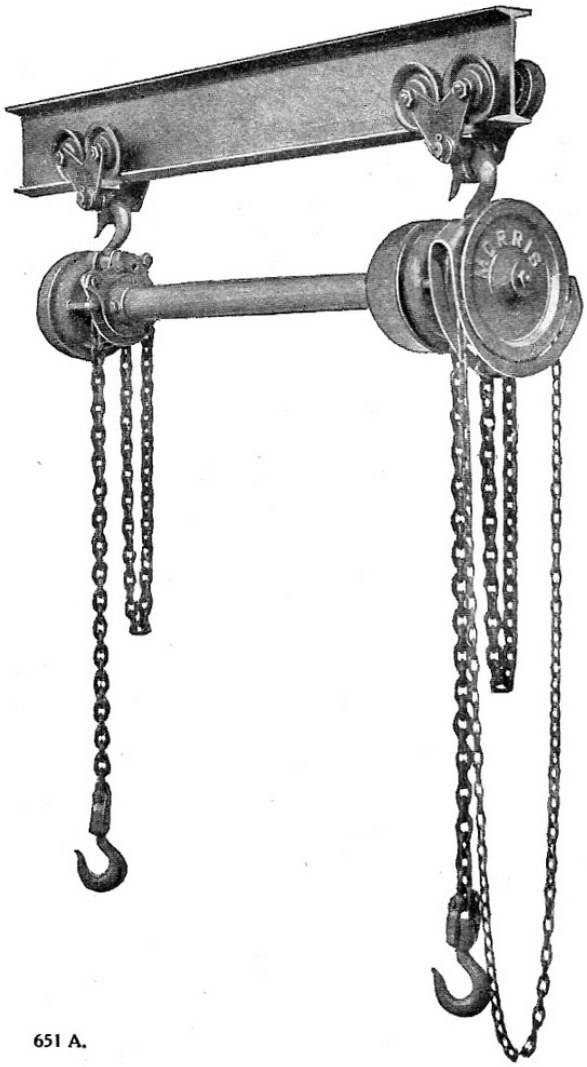

651 A.

THE TWIN-LIFT is a Morris adaptation of the Triple-gear chain-block. Like all Morris standard hoists it is made to meet a definite need.

Simultaneous lifting at two points is commonly a desirable feature of a hoist, but it must be accompanied by high mechanical efficiency reasonably fast lifting speed, and security.

Every tanner, for example, knows how hard it is to get a frame of hides out of the vat. The suction adds to the weight of the leather, and if, in addition, there is any jamming, the job is almost hopeless. The Morris Twin-lift gives a good clean hoist and saves a lot of trouble.

Total capacity	Distance from center to center of hooks						Add per foot lift	Standard lift, ft.
	3 feet	4 feet	5 feet	6 feet	7 feet	8 feet		
½ ton	$200	$202	$204	$206	$208	$210	$2.60	8
1 ton	$250	$253	$256	$259	$262	$265	$2.80	8
1½ ton	$320	$324	$328	$332	$336	$340	$3.00	8
2 ton	$370	$375	$380	$385	$390	$395	$3.20	9
3 ton	$450	$456	$462	$468	$474	$480	$5.00	10

Two hooks that lift as one

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

641 C.

THE MORRIS PLATFORM HOIST is the handpower freight elevator reduced to its simplest form. The lifting element is a Morris Twin-lift hoist, with all its good qualities—high efficiency, quick hoisting, easy operation, automatic brake, and enclosed gears.

The platform is usually made of heavy tongued and grooved boards, mounted on steel brackets and carried on roller-bearing wheels.

The popular size is ½-ton capacity, with a platform about 4 feet by 3 feet. The height may be anything from 4 feet lift to 30 feet, but for very long lifts the motor-driven hoist is more economical to use. The price of the standard ½-ton machine is $185 for a lift of twelve feet.

Other sizes are available to correspond with the various capacities of the Twin-lift hoist.

The hoist of a hundred uses

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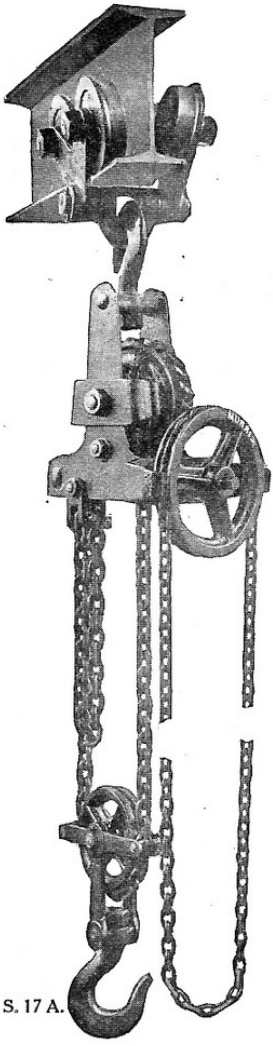


S. 17 A.

THE MORRIS WORM-GEAR BLOCK obtains its power by means of a worm and worm-wheel reduction. This gearing is essentially different from that used in the common "screw-hoist".

The worm of the Morris chain-block is of the double-thread type, and the pitch angle and form, selected after a long series of experiments, gives the highest practical efficiency.

The common screw hoist is fitted with a single-thread screw and wheel, which are usually cast gears, not machined. Such a hoist works stiffly, and the user finds it almost as hard to bring the load down as to hoist it up.

Gear friction in the Morris block is so low that it is necessary to fit an automatic brake to prevent the gears reversing.

The brake is put into action by the load itself, and its effect is just proportionate to the actual weight at any given time on the hook. There is no destructive excess, and the block is always easy to "lower-off".

The frame of the Morris Worm-gear block is made from rolled steel plates, drilled in a jig and riveted solidly together. This frame resists shocks that would be destructive to cast construction.

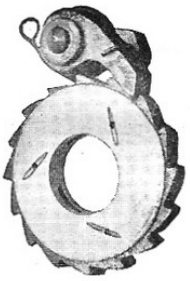
The worm is machine-cut from a solid steel bar and afterwards heat-treated to resist wear.

A weak point in most blocks employing two or more parts of chain is the connection of the live end of the chain to the frame. The Morris method makes use of half a link of the standard, tested chain, which is firmly clamped between two drop-forgings. This avoids the special link, not made in the regular course of manufacture and not tested as the rest of the chain is. This construction enables the user to reverse the chain if worn more at one end than at the other.

Morris Worm-gear blocks for rugged strength

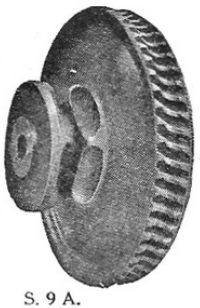
HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

The secret of the widely appreciated easy lowering of Morris chain-blocks is to be found in the well-balanced proportions and careful manufacture of the automatic brake. The ratchet-ring is a phosphor-bronze casting, cored out to contain the lubricating grease: both sides are faced perfectly smooth, and diagonal grooves are cut to ensure perfect distribution of the lubricant, so that wear is almost eliminated and the lubrication is automatic over a long period. The pawl swings on a steel pin and is held by a tempered steel spring.



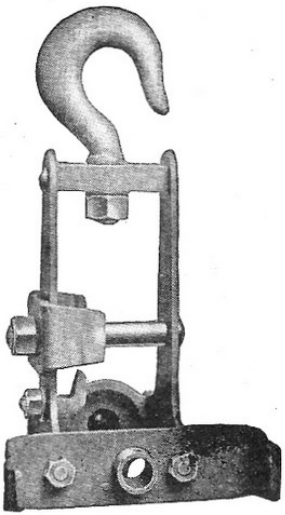
S. 10 A.

The worm-wheel and the load-chain sheave are combined in one simple casting, avoiding dependence on keys. The gear is machine-cut from the solid. Chain pockets are cast in accurately formed iron chills, resulting in a snug fitting chain and glass-hard chain pockets.



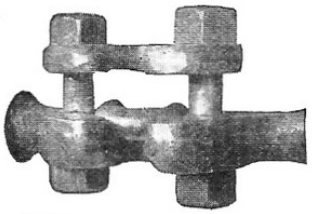
S. 9 A.

The safety of every Morris Worm-gear chain-block is carefully proved before it goes into active service. The only satisfactory proof is that obtained in an actual test. The Morris test consists in making the chain-block lift, by means of its own gears in the regular way, a load which is one-half greater than its rated working capacity. For example, a one-ton chain-block, with a rated capacity of 2240 pounds, is made to lift a measured load of 3360 pounds before it is shipped to the user.



S. 11 A.

S. 8 A.



S. 12 A.

A Worm-gear block that really is different

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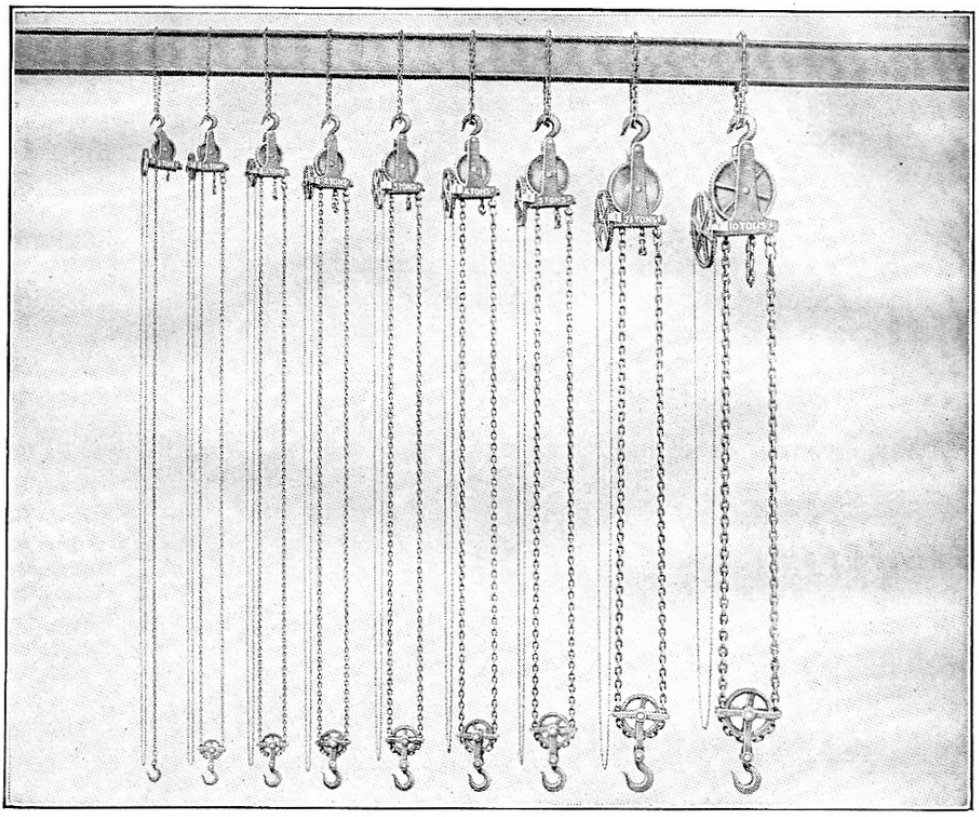
BUFFALO, N. Y.



S. 13 A. Morris Worm-gear chain-blocks up to 10-tons capacity.

The prices listed below include hand-chains and load-chains for the standard lift specified in the last line. The extra price per foot of additional lift, includes both hand-chains and load-chains. If the operator is not to stand at the level reached by the hook at its lowest position, the hand-chain should be made correspondingly longer or shorter.

Capacity in tons	1/8	1/4	1/2	1	1 1/2	2	3	4	5	7 1/2	10
Price, standard lift	$48.	$49.	$50.	$60.	$80.	$100.	$150.	$190.	$280.	$400.	$550.
Extra lift, per foot	$2.30	$2.40	$2.50	$2.60	$2.70	$2.80	$3.00	$3.80	$4.00	$5.80	$6.40
Ball-swivel hook	$8.	$8.	$10.	$12.	$16.	$18.	$22.	$26.	$30.	$34.	$38.
Standard lift, feet	8	8	8	8	8	9	10	10	12	12	12

See separate list for Worm-gear blocks up to 60-tons capacity

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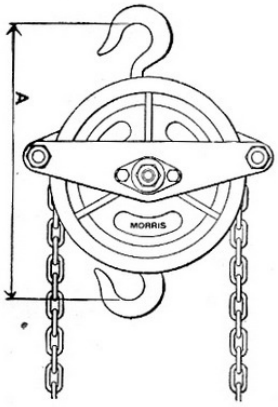
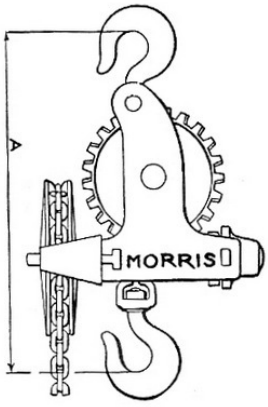
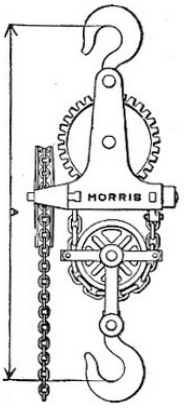


S. 26 A. Type 134.



B. 271 Type 129.



S. 27 A. Type 130.

The following figures on Worm-gear hoists are offered to assist in selecting correct equipment: individual hoists may give slightly different results from these average values, depending on conditions.

Chain-pull is figured for tons of 2000 pounds: speed of lift is based on a hand-chain speed of 150 feet per minute: this is normal for short lifts and for men regularly using hand-hoists. For light loads these speeds can be considerably increased.

The "reach" of a chain-block is ascertained by adding the clear-lift to the minimum length, or drawn up dimension "A".

Working load, tons	1/8	1/4	1/2	1	1 1/2	2	3	4	5	7 1/2	10
Standard type no.	134	129	129	130	130	130	130	130	130	130	130
Min. length "A"	11 1/2"	11 1/2"	1'4 1/2"	2'4"	2'8"	2'10 1/2"	3'2"	3'6"	3'10"	4'8"	5'5"
Overhaul, ft. lift	4 ft.	12	25	51	55	64	93	88	104	136	162
Chain-pull, full ld.	93	73	75	75	98	100	105	155	160	190	205
No. men, full load	1	1	1	1	1	1	1	2	2	2	2
Speed lift, pr. min.	37 ft.	12	6	3	2 1/2	2	1 1/2	1 1/4	1	7/8	3/4
Net weight in lbs.	34	36	62	82	100	140	179	236	285	439	696
Shipping wt., lbs.	46	50	80	100	120	165	220	280	420	570	830
Packing case, ins.	15x12 x12	15x12 x10	21x16 x15	24x19 x14	24x19 x14	28x21 x16	35x23 x19	35x23 x19	53x28 x26	53x28 x26	53x28 x26
Tel. code word	Gexyx	Gerat	Gerel	Gerim	Geron	Gerup	Geryr	Geras	Geset	Gesix	Gesob

All blocks shipped the same day the order arrives

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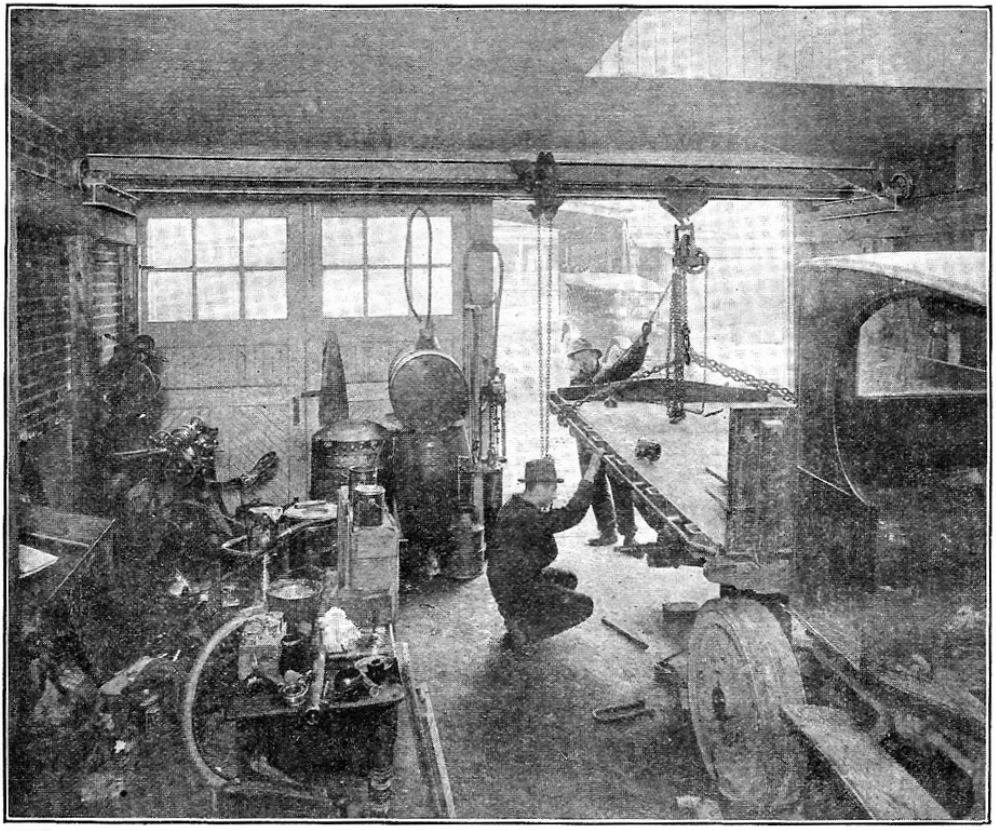
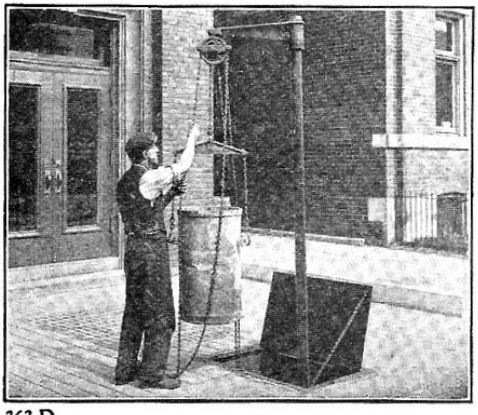
BUFFALO, N. Y.



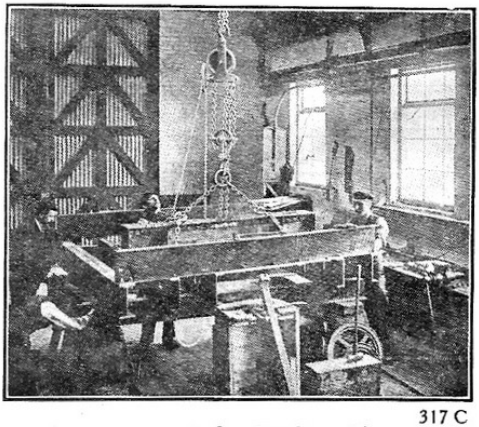
392 B.

When you want a hoist to stand the racket, day after day—hard work and hard knocks—you just naturally select a Morris Worm-gear chain-block.



363 D.

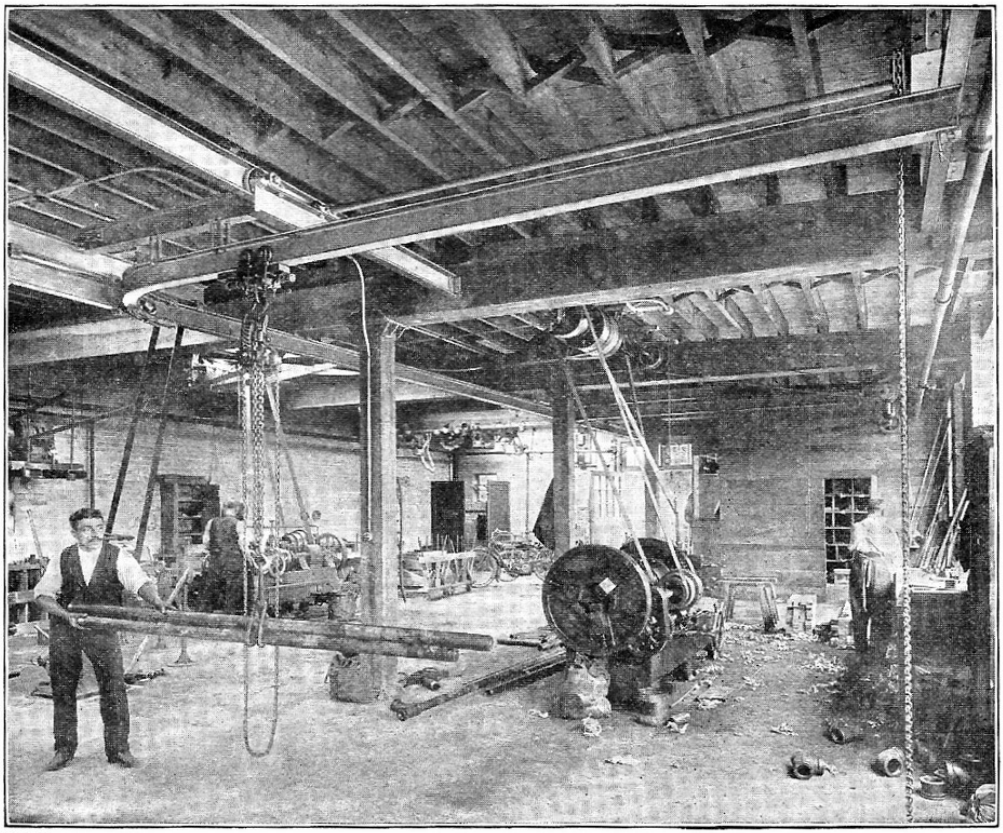
The speediest hoist



317 C

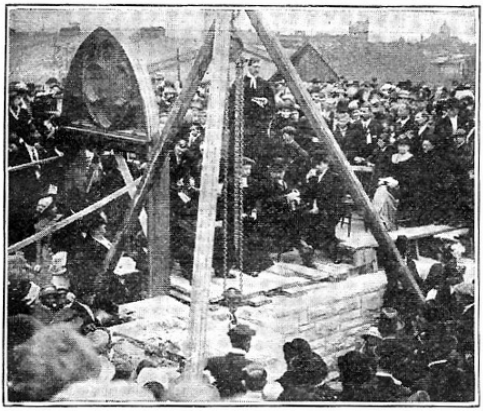
An automatic brake for safety

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.



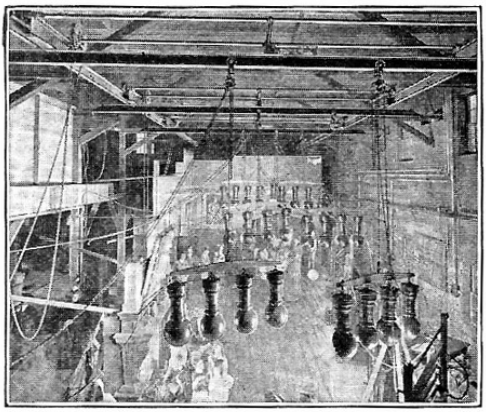
221 B.

Hung from a trolley or a crane, the Morris Worm-gear chain-block becomes doubly useful. Its high qualities make friends for it wherever it goes.



672 A.

For ceremonial occasions



238 B.

Used in a movie studio

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

Morris Differential Blocks are made in six sizes, and all capacities are measured in tons of 2240 pounds.

Prices

Capacity in tons	1/4	1/2	1	1 1/2	2	3
Price, standard lift	$36.00	42.00	56.00	72.00	90.00	120.00
Add per extra foot	$4.80	$4.80	$5.00	$5.40	$5.60	$6.00
Standard lift, feet	6	7	8	8 1/2	9	9 1/2

Prices for Re-place Parts

1. Top frame	$6.00	7.50	9.00	11.00	15.00	22.00
2. Top sheave	$7.20	9.60	12.00	16.80	24.00	31.20
3. Top sheave pin	$0.80	1.00	1.00	1.20	1.20	1.40
4. Bottom frame	$4.50	6.00	7.50	9.00	11.00	16.00
5. Bottom sheave	$1.80	2.60	3.00	3.80	4.50	7.50
6. Bottom sheave pin	$0.60	.80	.80	1.00	1.00	1.20
7. Standard chain	$30.80	36.40	45.00	57.80	61.20	76.00

General information

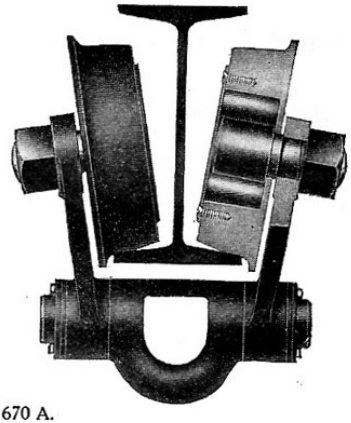
Shortest length, ins.	16	20	25	30	36	40
Net weight, pounds	25	33	52	80	120	148
Shipping weight, lbs.	50	55	80	120	160	190
Packing case, inches	12 x 12 x6	12 x 12 x6	12 x 12 x12	15 x 12 x12	15 x 12 x12	20 x 15 x15
Telegraphic code word	Delas	Demet	Demob	Demuc	Demyd	Demaf

The reach of a block is determined by adding the "lift" to the "shortest length", which is the distance between hooks when drawn up close.

The name on the block means more than the price

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

MORRIS PUSH TROLLEYS run easily. Any man who has used one will tell you so. They keep a fellow stepping all day to stay with them, and he does not end the day feeling like a chewed rag. That means real production for the manager.



670 A.

The easy running is due to the roller-bearings, fitted to all sizes. The rollers are big, sturdy things, and they run on large axles. Look at the picture. This bearing is not a bundle of wires, but a real roller-bearing which carries the load swiftly and smoothly and lives a long time.

Type 15 trolleys are shown on this page. They are good for straight tracks or curved, the wheel flanges being specially shaped to coax the trolley around the bends. For very sharp curves, the Morris "flexible" trolley is preferred by some of our friends, but it usually pays to put in the track turns with a fairly free sweep, and use "type 15".

The hook-bar is designed to give great strength and rigidity, thus keeping the wheels in correct relation to the track surfaces, but it also provides for irregularities in the I-beam, and distributes the load equally between the four wheels.

Dimension "A" in the table below is the distance from the bottom of the beam to the suspension point of the hook-bar.

Working load in tons	1/2	1	1 1/2	2	3	4	5
Price of one trolley	$27	$32	$43	$51	$67	$85	$107
Dimension "A", see above	2 1/2"	3"	3 3/4"	4"	4"	5 1/4"	5 1/4"
Diameter of tread	3 1/2"	4 1/2"	5 3/4"	6 1/4"	6 1/4"	8"	8"
Range of beam sizes, inches	4–12	5–15	7–20	7–20	7–20	9–24	9–24
Minimum radius	22"	24"	33"	39"	42"	48"	54"
Effort for full load, lbs.	12	20	29	36	53	72	88
Net weight, lbs.	11	26	58	64	68	95	108
Telegraphic code word	Zyuzy	Zyvap	Zyvir	Zyvos	Zyvpa	Zyvso	Zyvut

Give particulars of hanger-bolts when ordering trolleys

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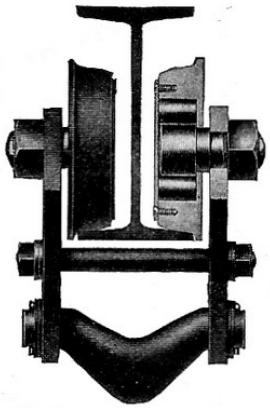


671 A

MORRIS TROLLEYS of the push type are also made with steel-plate side frames set vertically. These form a very strong structure, and some of our customers prefer them; they ask for "Morris Type 125".

The wheels have a rounded tread to give a true running surface, and the slight side reaction is borne by a spherical thrust-bearing on the end of the axle.

The bearings are closed by a steel plate which retains the grease and excludes dust, dirt or moisture. Enough lubricant is put in the bearings for steady running during many months. They roll along almost indefinitely without care.

Clearance is provided between the hook-bar and the bottom of the track-beam, so that a fishplate can be used on the lower flange, although in a well-planned runway system such plates are better omitted.

Spacing washers permit the use of these trolleys on two ranges of I-beam, the total extent of the variation in the two ranges being given in the table below. Larger sizes fitted on request.

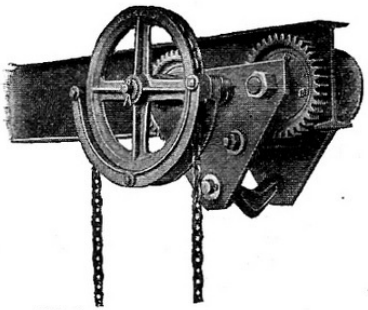
The height from the point of contact between hoist-hook and hook-bar to the lower flange of the beam is given in the table as "Dimension A".

Working load in tons	1/2	1	1 1/2	2	3	4	5	7 1/2	10
Price of one trolley	$27	$32	$43	$51	$67	$85	$107	$165	$213
Dimension "A", see above	3 1/4"	3 1/2"	4"	4 1/4"	4 1/2"	6 1/4"	6 1/4"	10"	10 3/4"
Diameter of tread	3 3/4"	4 1/2"	5"	5 3/4"	5 3/4"	7 1/4"	7 1/4"	7 1/4"	8 3/4"
Range of beams, inches	5–12	6–15	7–15	7–15	8–18	9–20	9–20	10–20	12–24
Radius of track curve	30"	33"	39"	54"	60"	78"	90"	105"	120"
Effort for full load, lbs.	12	20	30	40	62	85	110	175	230
Net weight, lbs.	25	40	60	80	100	160	165	290	410
Telegraphic code word	Gegyc	Gegad	Gegef	Gekeg	Gekik	Gekol	Gekun	Gekyn	Gekap

Immediate shipment from stock

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

GEARED TROLLEYS are not employed as generally as their good qualities would warrant. The Morris Type 126 trolley is a very useful tool. With it, one man is able to move the heaviest load without assistance and without undue exertion.


638 A.

Accurate placing of the load is only possible with a geared trolley. This feature is valuable in assembling machinery, in laying water pipe, and in many other operations.

Propelling the trolley from away to one side or from a considerable distance below the track is feasible only when the track wheels are geared.

Type 126 trolleys are fitted with standard Morris roller-bearings, described on another page. These reduce the effort required to travel the load by 75 per cent.

Plate-steel sides, and forged cross-stays insure an ample margin of safety. Careful design has provided a high suspension point, thus avoiding the serious loss of head-room noticeable in many trolleys. The distance from the point of suspension to the under side of the beam is given as Dimension "A" in the table below.

Working load	Price for one trolley	Dimension "A" see above	Range of I-beams	Diameter wheel-tread	Net weight one trolley	Telegraphic code word
1 ton	$64.	3½"	6"–15"	4½"	70 lbs.	Gelyb
1½ ton	$75.	4"	7"–15"	5"	90 lbs.	Gelac
2 ton	$85.	4¼"	7"–15"	5¾"	120 lbs.	Gemed
3 ton	$107.	4½"	8"–18"	5¾"	140 lbs.	Gemif
4 ton	$135.	6¼"	9"–20"	7¼"	240 lbs.	Gemog
5 ton	$160.	6¼"	9"–20"	7¼"	245 lbs.	Gemuk
7½ ton	$290.	10"	10"–20"	7¼"	370 lbs.	Gemyl
10 ton	$347.	10¾"	12"–24"	8¾"	520 lbs.	Gemam
12½ ton	$420.	11¼"	12"–24"	8¾"	595 lbs.	Genen
15 ton	$935.	11¾"	18"–24"	12"	910 lbs.	Genip
20 ton	$1075.	12"	20"–24"	12"	1050 lbs.	Genor

Geared wheels for power and accurate placing

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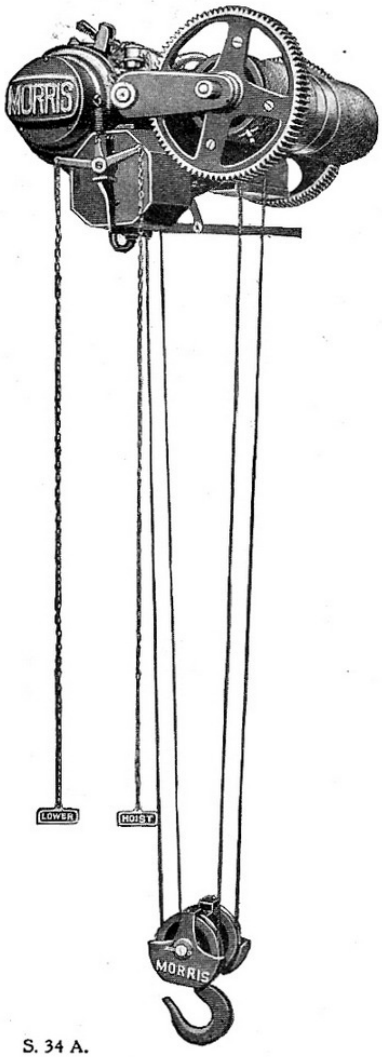

S. 34 A.

MORRIS ELECTRIC ROPE-HOISTS are the simplest, most portable and most efficient on the market.

Simplicity is an outstanding feature of the design, the number of parts being reduced to a minimum. For example, the motor and hoist frames are in one piece, thus avoiding a large number of connecting bolts or studs.

Compactness is the result of a skilful disposition of the parts: it is as notable in the close head-room as in the small width and length of the hoist. Yet all parts are easily accessible for inspection, maintenance or dismounting.

High efficiency is secured by the use of machine-cut spur-gears, ample sheave diameters and reasonable, well-lubricated bearings. It is maintained through years of service by the simple, sound, solid construction of the hoist.

Portability conveys its true meaning as applied to Morris electric rope-hoists: being always in balance they require no bolted connection to the support, and in consequence they may be quickly taken down, "carried from place to place," hung from any convenient point and put to work instantly. Study of the picture will show that there are no flimsy projections or attachments likely to be damaged when the hoists are set down on the floor or on a truck for removal. That they are light and easy to move, results from the simple, compact form of the hoists.

Morris rating is in tons of 2240 pounds

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

For direct-current operation the Morris electric rope-hoist is fitted with a specially-designed series-wound slow-speed motor. The pole-pieces are made integral with the field casting, avoiding the use of bolts or studs and securing superlatively good magnetic qualities. The series-wound motor provides a hoisting speed which automatically increases as the load is reduced. Small weights are handled quickly, heavy weights are moved powerfully.

The brakes are two in number, giving double protection to the load. The magnetic brake is released by a solenoid and applied by powerful springs whenever the current is cut off either by the operator's hand on the control cord, by the centering device or by the limit stop. This brake is of the dry, multiple disc type with re-inforced asbestos lining. The centrifugal brake acts as a governor to prevent excessive speed at any time; it seldom comes into operation but is always in reserve for an emergency.

Bronze bushings are provided for shaft bearings and are readily replaceable when required.

A truly vertical lift is obtained with all sizes of the standard hoist, the load being lifted on four parts of special, flexible plow-steel wire-rope. The hoist remains in perfect balance with the bottom-block at any point in its normal travel.

Every hoist is tested with a fifty per cent overload before shipment as a final check on the whole series of inspections and tests during manufacture.

Working load		½ ton	1 ton	2 tons	3 tons	5 tons
Price for direct-current rope-hoists	100-110 volts code word	Prices on application				
	200-550 volts code word					
Alternating current	220-600 volts code word					
Add for graduated control		$145.	$160.	$175.	$190.	$205.
Add for remote control		$ 75.	$ 75.	$ 75.	$ 80.	$100.
Add for over-lowering limit		$ 20.	$ 25.	$ 25.	$ 25.	$ 30.
Add for controller extension		$ 30.	$ 35.	$ 35.	$ 35.	$ 40.

Not a hand-hoist electrified, not a cut-down crane

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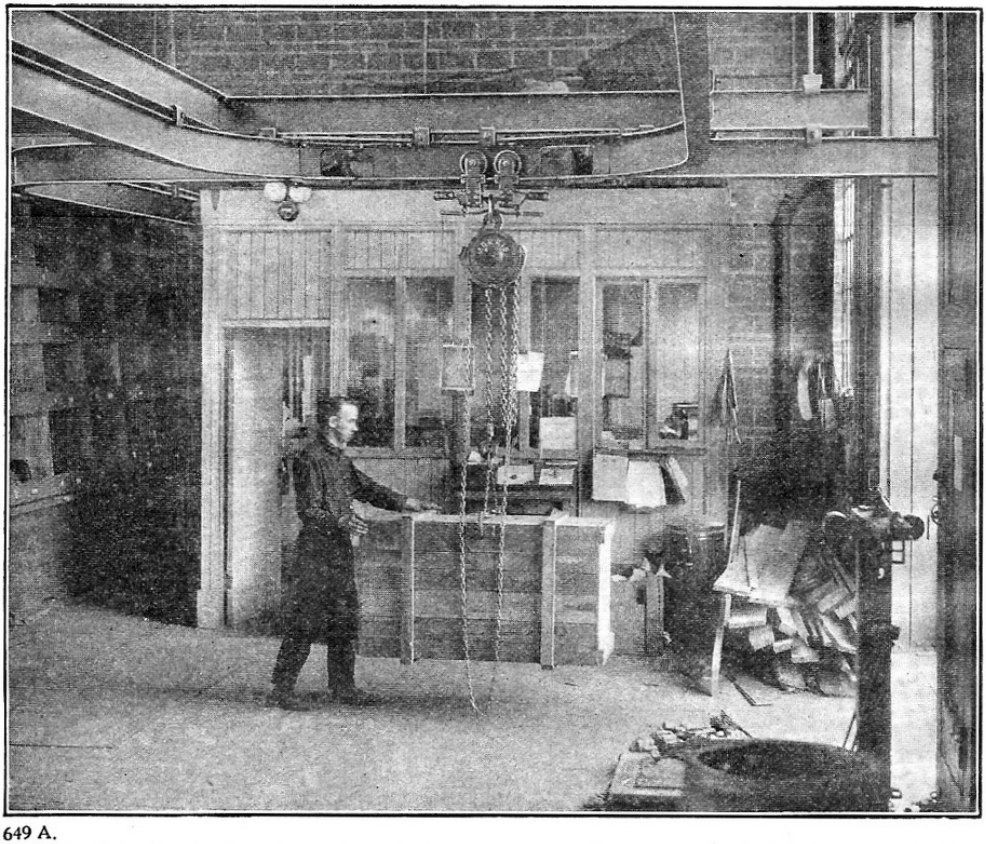
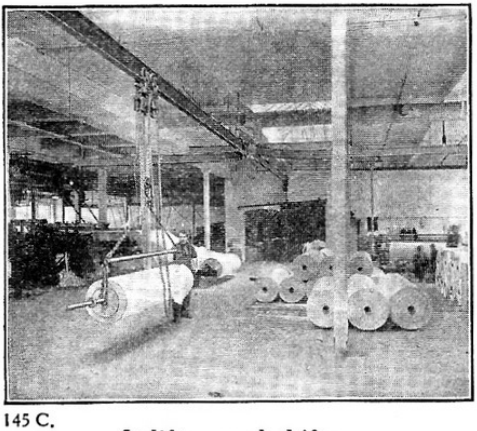


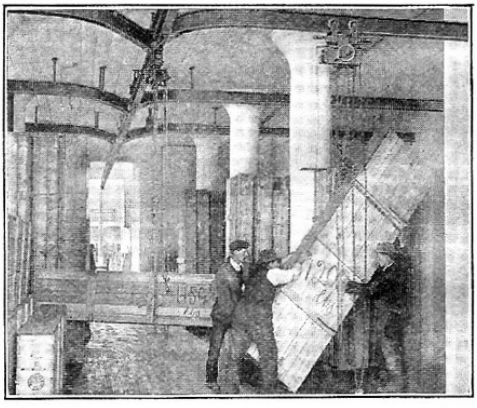
649 A.

The Morris overhead track switch has **no moving parts:** think how much that saves, of time, trouble and danger: book 5040 tells the whole story.



145 C.

It lifts—and shifts



395 A.

The track without trouble

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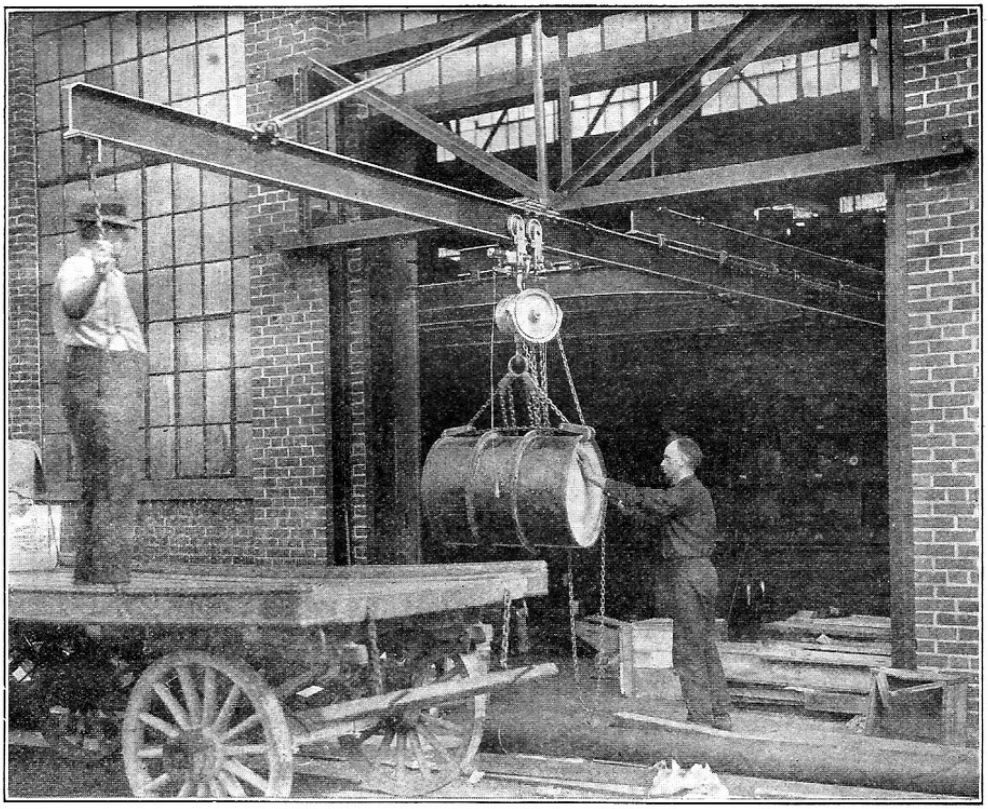
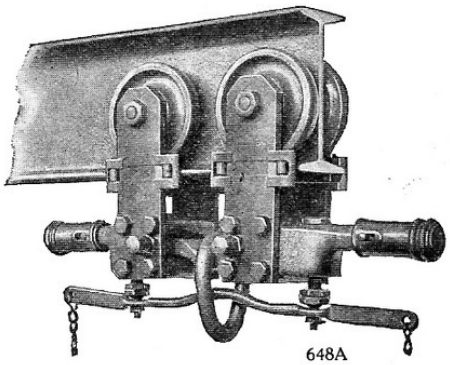


652A

The trolley is another vital element in Morris overhead runways. It is flexible in construction, so that it "flows" round the bends as easily and smoothly as along straight track.

Guide rollers keep the trolley located centrally on the track: anti-friction bearings in large wheels complete the arrangement for easy running. Each trolley carries its own steering gear, and the taking of switches is done without slowing up the trolley, at the will of the operator. Spring bumpers prevent the trolleys from damaging each other and save the load from bad shocks.



648A

Try the Morris way—the "runway"

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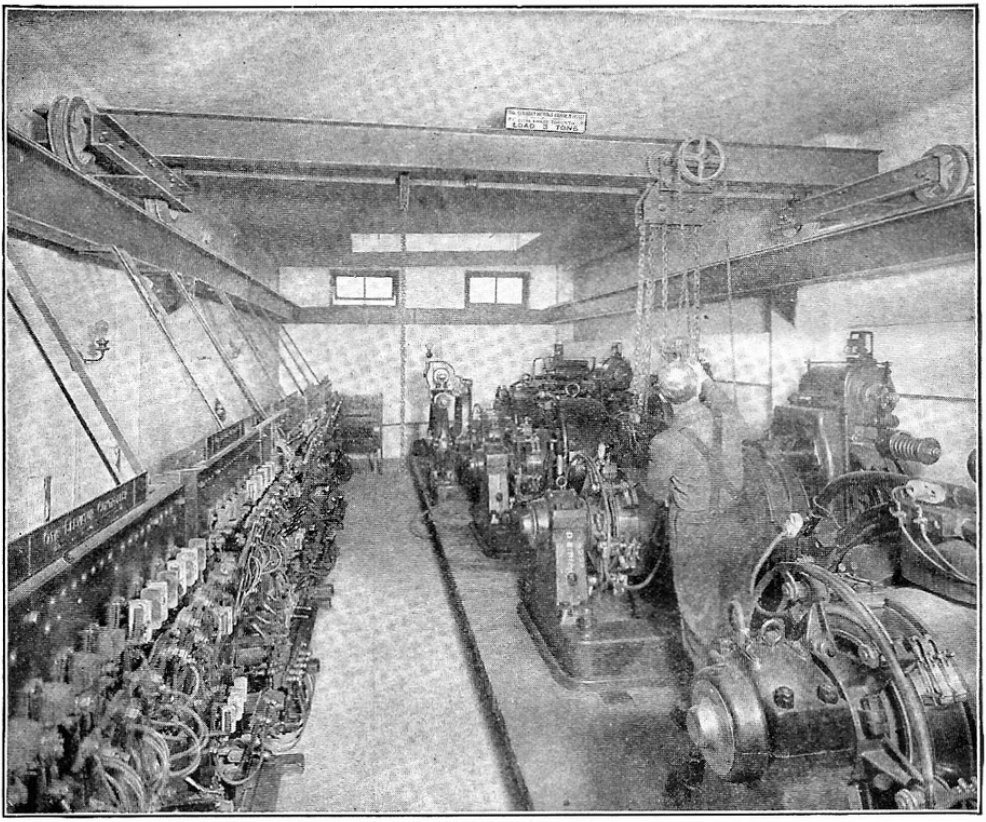
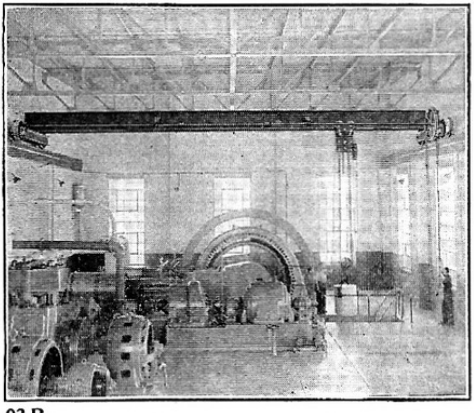


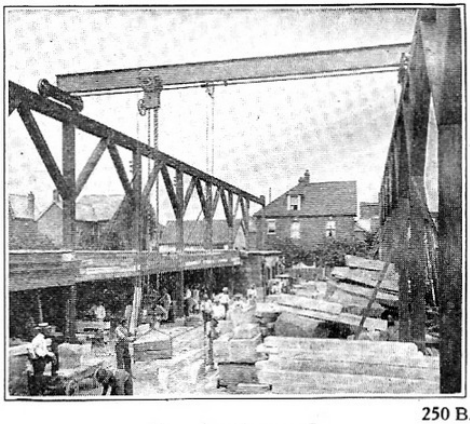
248 C.

Book 5060 deals fully with the wide range of Morris standard overhead cranes. Every engineer and every factory manager should have a copy right at his elbow.



92 B.

Light construction



250 B.

Ample strength

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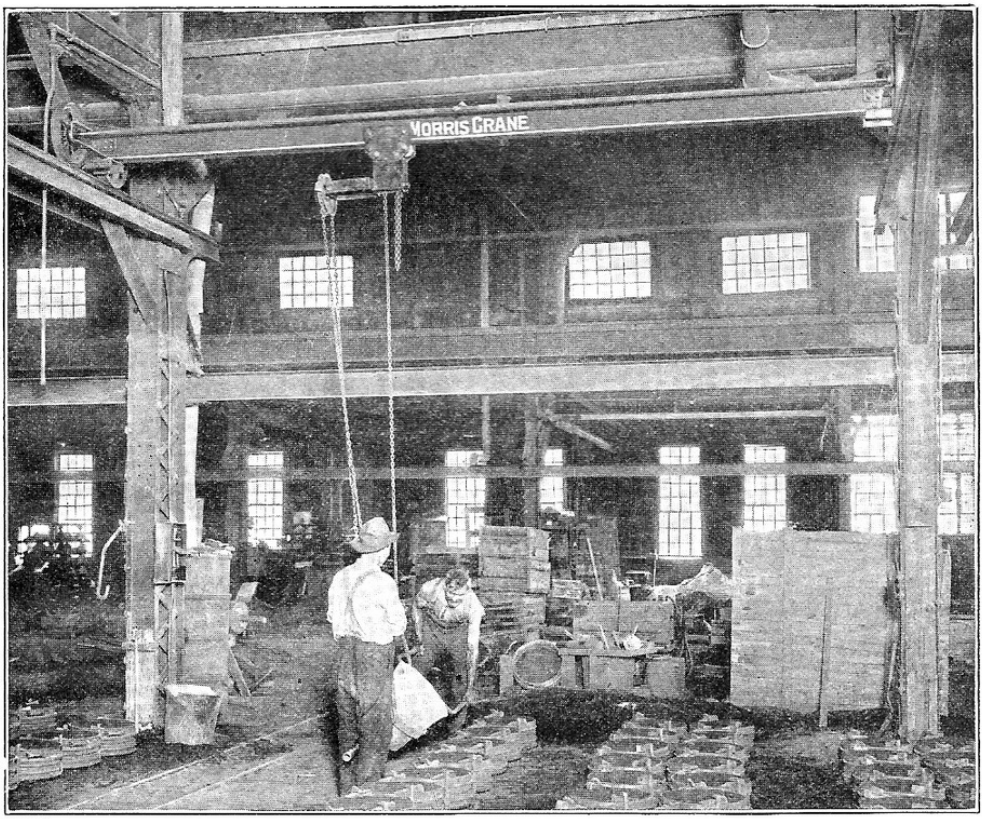
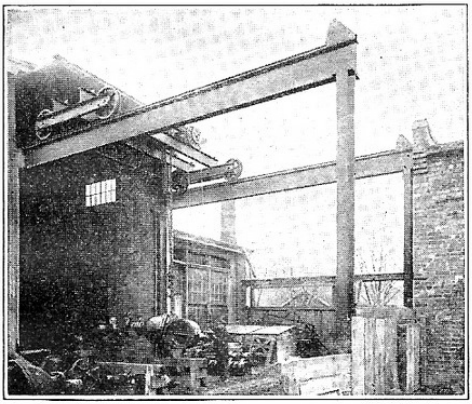


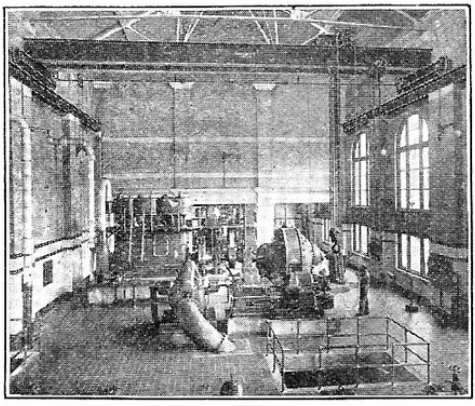
653 B.

Morris handpower cranes are made on quantity production lines. That is why you can buy so good a crane at so reasonable a price.



394 B.

Made in batches



380 C.

Shipped from stock

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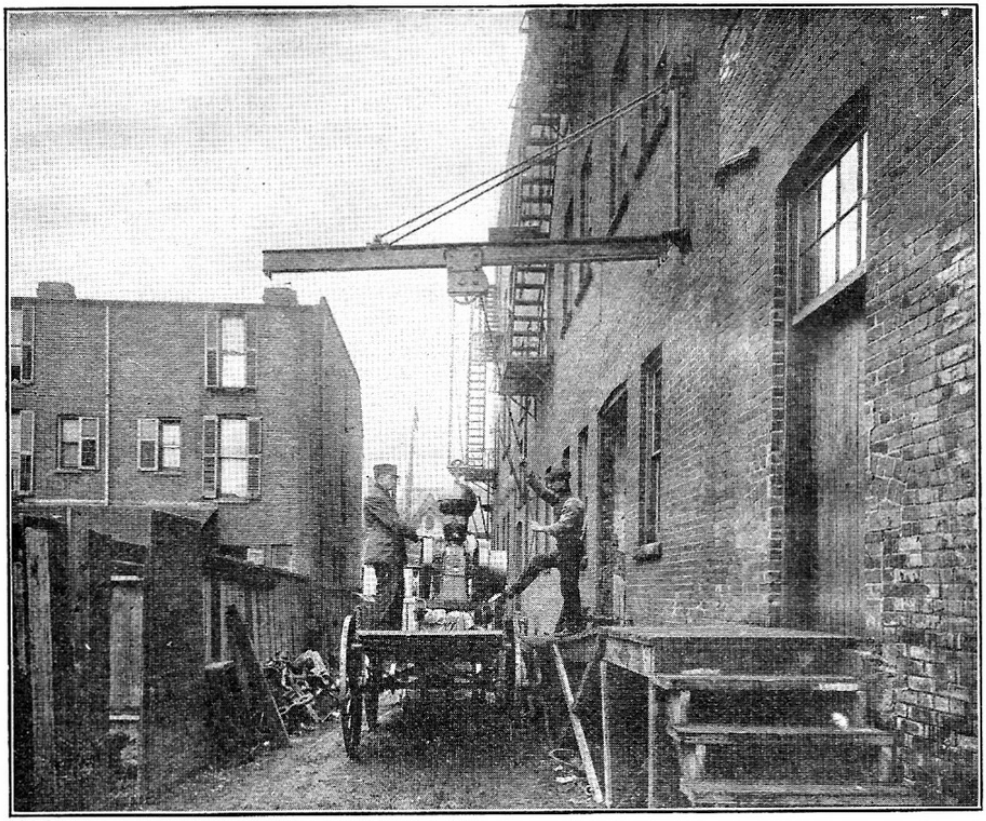
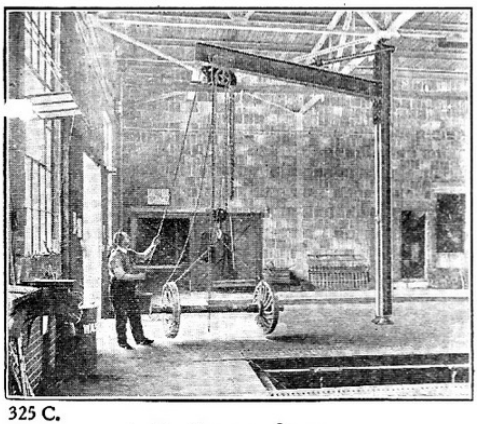


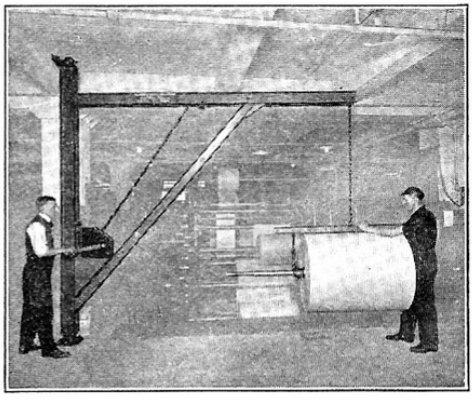
396 B.

Morris jib-cranes are also highly standardized for rapid production at moderate cost, book 5055 illustrates many types and various applications.



325 C.

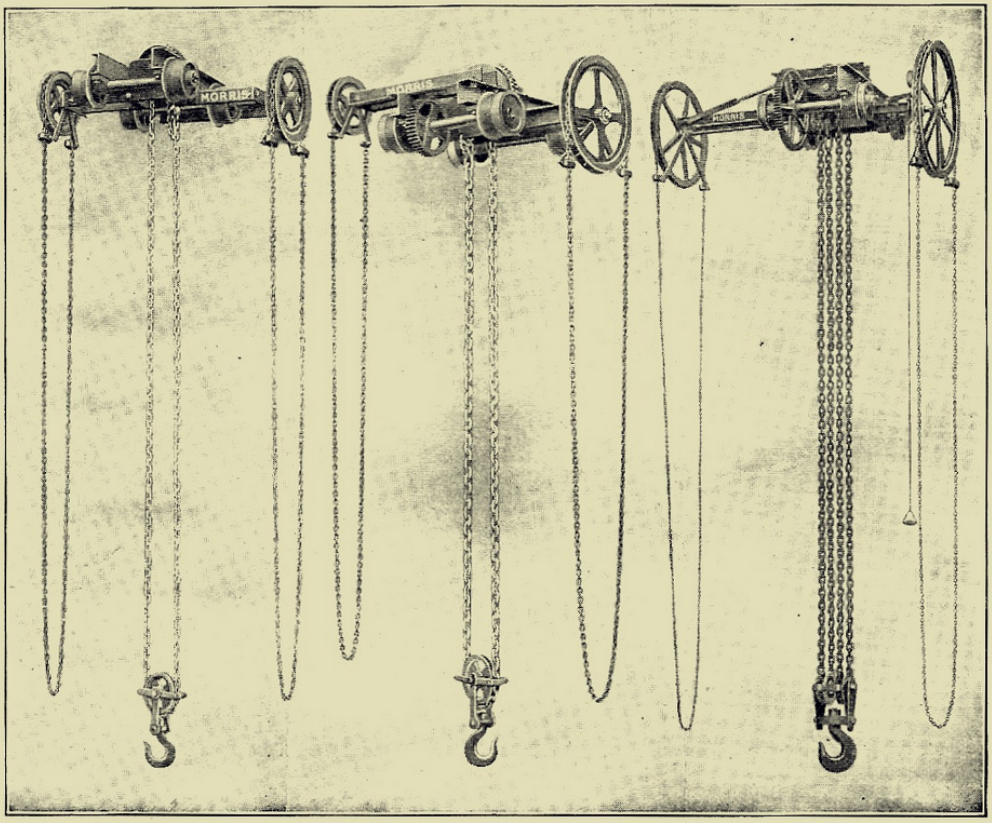
In the car barn



323 A.

In the pressroom

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.



690 2-tons to 4-tons 5-tons to 15-tons 20-tons and 30-tons

MORRIS CRANE TROLLEYS are made for crane service. They are more substantially built than a chain-block, and they have special features to meet the conditions found in using overhead cranes.

Notice the extension of both hand wheels away from the hook. That keeps the operator free of the load and promotes speed in handling. The frame is built of rolled-steel shapes—light, safe.

Load in tons	2	3	4	5	7½	10	12½	15	20	30
Price, 10 feet lift	$370.	$460.	$550.	$600.	$750.	$900.	$1500.	$1810.	$2220.	$3850.
Extra foot lift, add	$3.80	$4.00	$4.60	$5.00	$6.40	$6.80	$9.00	$11.00	$11.80	$20.20
Roller-b'g. wheels, add	$70.	$80.	$100.	$110.	$120.	$140.	$170.	$190.	$210.	$280.
Ball-swivel hook, add	$18.	$22.	$26.	$30.	$34.	$38.	$42.	$50.	$64.	$94.
Double-speed block, add	$16.	$18.	$22.	$26.	$30.	$42.	$86.	$100.	—	—
Telegraph codeword	Basyn	Basap	Bater	Batis	Batot	Batux	Batyb	Batac	Baxed	Baxif

Machine-cut gears give easy lifting

HERBERT MORRIS INCORPORATED
BUFFALO, N. Y.

MORRIS TWO-WAY HOISTS give quick and reliable service for hoisting or lowering loads between the various floors of a factory or warehouse.

One hook goes up as the other comes down. That saves the time usually lost in lowering the empty hook. The hand-chain may be worked from any floor or various floors.

An automatic brake sustains the load indefinitely: no need to hold the hand-chain or to "make fast" as with a rope-hoist.

Installation is a very simple matter. The hoist is fastened down by four bolts or lag-screws to two parallel wood or steel beams.

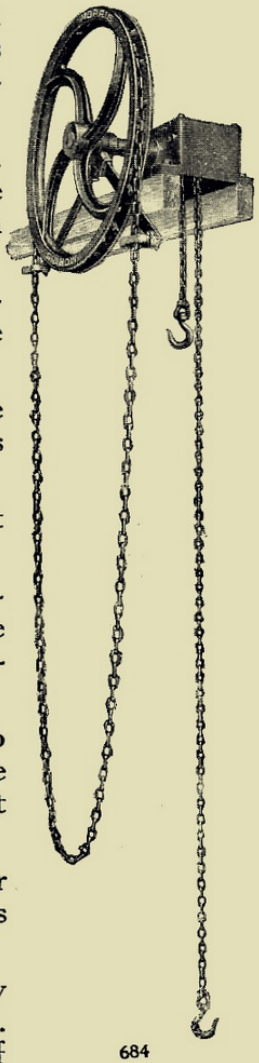
If preferred, the hoist may be reversed, that is, suspended from the supports.

Simplicity of design makes these hoists practically "fool-proof." Given the most ordinary care and attention they will continue to operate without trouble or hitch.

The high efficiency of these hoists is due to the straightforward design, coupled with the care exercised in manufacture: very little of the effort put into the hand-chain is absorbed in friction.

The test load on all these hoists is fifty per cent over the rated capacity: the regular Morris **safety-first test** for your protection.

An alternative arrangement preferred by some of our friends is to fit an endless load-chain. The load is then attached to the chain by means of slings fitted with a Morris patented chain-clutch. Full particulars on request.



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Working load	250 pounds	500 pounds	1000 pounds
Price—10 feet clear lift	$ 65.00	$ 95.00	$ 165.00
Load-chain, add per foot of lift	$ 1.80	$ 1.90	$ 2.00
Hand-chain, add per foot of lift	$ 0.50	$ 0.50	$ 0.50
Add for ball-swivel, both hooks	$ 16.00	$ 16.00	$ 20.00

No time lost in lowering the empty hook

HERBERT MORRIS INCORPORATED

MAKERS OF CHAIN-HOISTS, MONORAILS, CRANES

BUFFALO, N. Y.

ASSOCIATED WITH
THE HERBERT MORRIS CRANE & HOIST CO., LTD., CANADA
HERBERT MORRIS LTD., ENGLAND
ETABLISSEMENTS HERBERT MORRIS, FRANCE
ENGINS DE LEVAGE HERBERT MORRIS, BELGIUM

Sept. 12th, 1923.

Dear Sirs:

We do business direct with our customers as well as through their regular dealers.

In this way we are able to insure that individual attention which gives so much more satisfaction. A hoist is not "hardware." You don't buy a hoist like a keg of nails if you expect to get just the right hoist for the job.

When we know the conditions we select from the many standard hoists the ONE HOIST that will do the work best. It is tested with a fifty-per-cent overload and despatched direct to you. We are organized for manufacturer-to-user trade, and can give you splendid service and guarantee full satisfaction on every order, large or small.

The attached book deals with a small selection of Morris hoists. If you see the type you need we can fill your order at once. If not, tell us just what you want to do and we will quote for a suitable hoist.

Yours truly,

HERBERT MORRIS INCORPORATED

Malcolm D. Peldum

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President.